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=> FILE REG
FILE 'REGISTRY' ENTERED AT 17:12:54 ON 04 JAN 2007
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=> D HIS

     FILE 'REGISTRY' ENTERED AT 16:37:02 ON 04 JAN 2007
L1                STR
L2                STR L1
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L4              1 S L1
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     FILE 'ZCAPLUS' ENTERED AT 17:00:00 ON 04 JAN 2007
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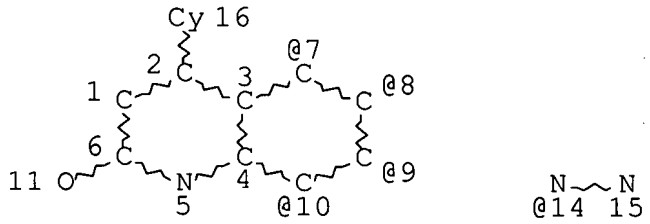

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=> FILE CAOLD
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

=> D L8 1 ALL HITSTR

L8 ANSWER 1 OF 1 CAOLD COPYRIGHT 2007 ACS on STN
AN CA51:2287g CAOLD
TI 6-aminocarbostyrilazo dyes
AU Brody, Frederick; Leavitt, J. J.; Long, R. S.
DT Patent
TI dyes (6-aminocarbostyrilazo)
PA American Cyanamid Co.
DT Patent

PATENT NO.	KIND	DATE
US 2754293		1956

IT 54904-40-4 66570-46-5 98994-01-5 99852-27-4 100060-30-8
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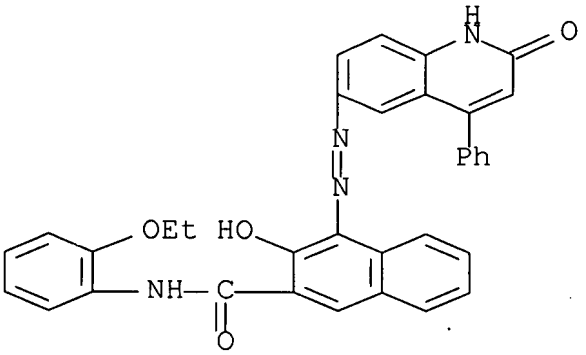
103269-36-9 103271-74-5 106273-28-3 109450-56-8 109645-99-0
113325-46-5 **122337-21-7** 123102-63-6 131762-11-3
IT **122337-21-7**
RN 122337-21-7 CAOLD
CN 2-Naphtho-o-phenetidide, 4-(1,2-dihydro-2-oxo-4-phenyl-6-quinolylazo)-3-hydroxy- (6CI) (CA INDEX NAME)



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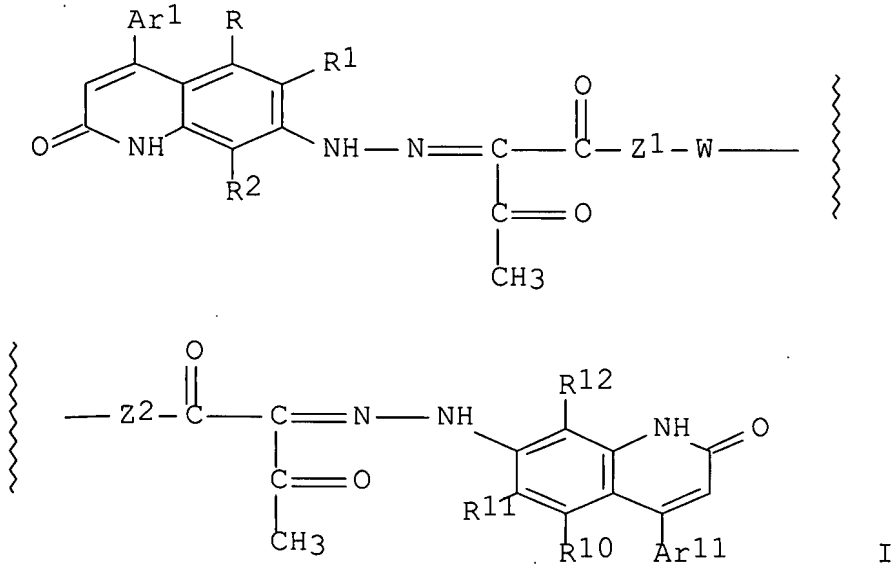
=> D L9 1-5 CBIB ABS HITSTR HITRN

L9 ANSWER 1 OF 5 ZCAPLUS COPYRIGHT 2007 ACS on STN

2004:1127442 Document No. 142:58222 Bisazoquinolone pigments with good fastness properties, processes for their preparation and their use. Benkhoff, Johannes; Huegin, Max; Eichenberger, Thomas (Ciba Specialty Chemicals Holding Inc., Switz.). PCT Int. Appl. WO 2004111134 A1 20041223, 25 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2004-EP51023 20040604. PRIORITY: CH 2003-1036 20030613.

GI



I

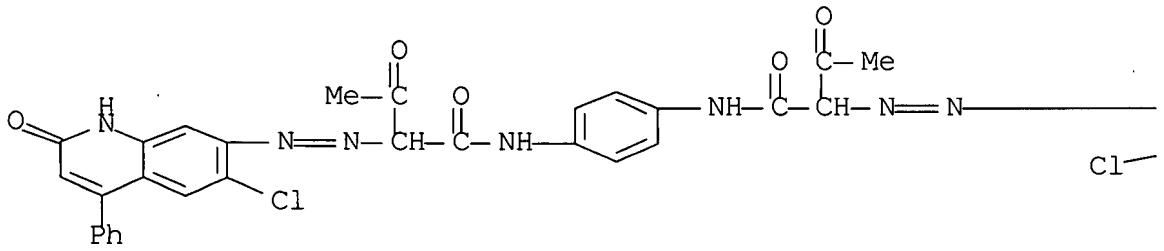
AB The invention relates to bisazoquinolone pigments which, in one of the tautomeric forms thereof, correspond to formula (I). The W is the radical of an unsubstituted or substituted C6-C24 aryl or the radical of an unsubstituted or substituted heteroaryl. The Ar1 is unsubstituted or substituted C6-C24 aryl or unsubstituted or substituted heteroaryl. The Ar11 is unsubstituted or substituted C6-C24 aryl or unsubstituted or substituted heteroaryl. The R, R1, R2, R11, R12 are each independently of the others hydrogen, C1-C6 alkyl, halogen, cyano, CF3, nitro, NR3R4, COOR4, NR4COR3, COOX+, COR4, OR4, SR3, S02R3, S02NR3R4 S03-X+, or C6-C24 aryl unsubstituted or mono- or poly-substituted by R5. The R3 is C1-C6 alkyl, or C6-C12 aryl unsubstituted or mono- or polysubstituted by halogen, hydroxy, OR7, cyano, nitro, SR7, NR6R7, COOR7, CONR6R7, NR6COR7, NR6COOR7, COO-X+, COR4, OR4, S02R7, S02NR6, S03-X+ or by S03R7. The R4 is hydrogen or has the same meanings as R3; R5 is hydrogen, C1-C4 alkyl, halogen, nitro, NR7R8 or OR7; and R6 is hydrogen or C1-C3 alkyl. The R7 and R8 are each independently of the other hydrogen, C1-C3 alkyl, Ph unsubstituted or mono- or poly-substituted by halogen, nitro, OR5 or by NR16R17, or benzyl unsubstituted or mono- or poly-substituted by halogen, nitro, OR5 or by NR16R17, and X+ is a cation H+, Li+, Na+, K+, Mg++1/2, Ca++1/2, Sr++1/2, Ba++1/2, Cu+, Cu++1/2, Zn++1/2, Mn++1/2, Al+++1/3 or [NR19R20R21R22]+ wherein R19, R20, R21 and R22 are each independently of the others hydrogen, C1-C6 alkyl, Ph unsubstituted or mono- or polysubstituted by C1-C6 alkyl, halogen, nitro, OR5 or by NR16R17, or benzyl unsubstituted or mono- or poly-substituted by C1-C6 alkyl, halogen, nitro, OR5 or by NR16R17, R16 and R17 are each independently of the other hydrogen or C1-C6 alkyl. The Z1 is -NH- or -0-, and Z2 is -NH or -0-, are suitable for coloring high mol. wt. material and are distinguished by the resulting colorations having good fastness properties.

IT **810667-28-8P**
(greenish-yellow pigment; prodn. of bisazoquinolone pigments with good fastness properties for coloring of high mol. wt. materiuals)

RN 810667-28-8 ZCAPLUS

CN Butanamide, N,N'-1,4-phenylenebis[2-[(6-chloro-1,2-dihydro-2-oxo-4-phenyl-7-quinolinyl)azo]-3-oxo- (9CI) (CA INDEX NAME)

PAGE 1-A



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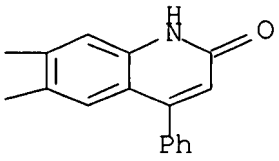
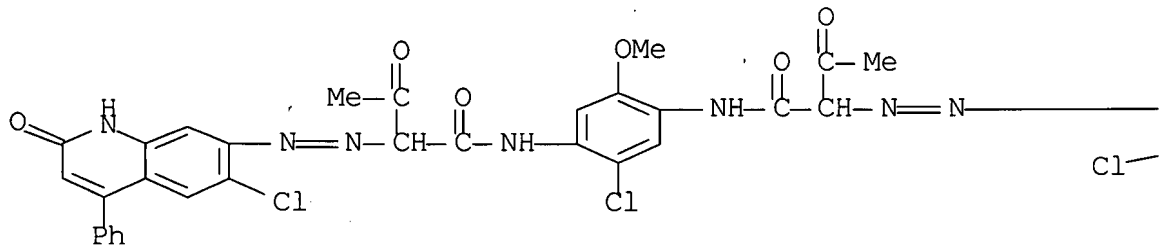


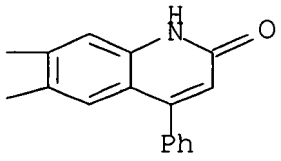
IT **810667-27-7P**
(yellow pigment; prodn. of bisazoquinolone pigments with good fastness properties for coloring of high mol. wt. materiuals)

RN 810667-27-7 ZCAPLUS

CN Butanamide, N,N'-(2-chloro-5-methoxy-1,4-phenylene)bis[2-[(6-chloro-1,2-dihydro-2-oxo-4-phenyl-7-quinolinyl)azo]-3-oxo- (9CI) (CA INDEX NAME)

PAGE 1-A





IT **810667-28-8P**
(greenish-yellow pigment; prodn. of bisazoquinolone pigments with good fastness properties for coloring of high mol. wt. materiuals)

IT **810667-27-7P**
(yellow pigment; prodn. of bisazoquinolone pigments with good fastness properties for coloring of high mol. wt. materiuals)

L9 ANSWER 2 OF 5 ZCAPLUS COPYRIGHT 2007 ACS on STN

2004:823956 Document No. 141:333640 Monoazoquinolone pigments, process for their preparation and their use. Benkhoff, Johannes; Wallquist, Olof (Ciba Specialty Chemicals Holding Inc., Switz.). PCT Int. Appl. WO 2004085540 A1 20041007, 46 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2004-EP50308 20040315. PRIORITY: CH 2003-515 20030325.

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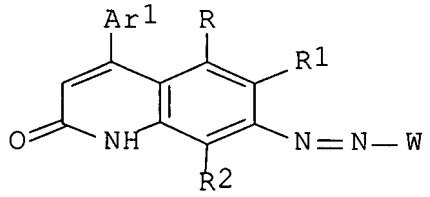


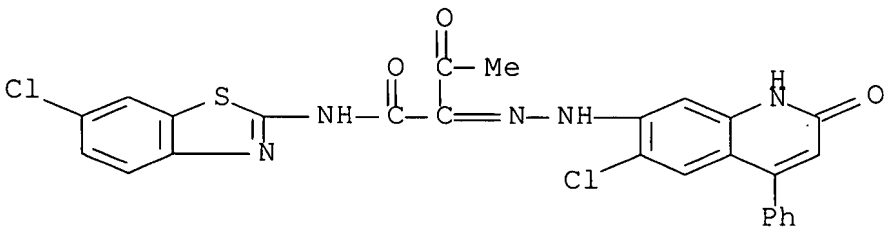
I

AB Monoazoquinolone pigments, in one of their tautomeric forms, correspond to I. In I, W is (substituted) C6-24 aryl or (substituted) heteroaryl or is a radical of formula (1a), wherein Ar1 is (substituted) C6-24 aryl or (substituted) heteroaryl, R, R1 and R2 are each independently hydrogen, C1-6 alkyl, halogen, cyano, CF3, nitro, NR3R4, COOR4, NR4COR3, COO-X+, COR4, OR4, SR3, SO2R3, SO2NR3R4, SO3-X+, or C6-24 aryl which is unsubstituted or mono- or polysubstituted by R5. R3 is C1-6 alkyl, or C6-12 aryl which is unsubstituted or mono- or poly-substituted by halogen, hydroxy, OR7, cyano, nitro, SR7, NR6R7, COOR7, CONR6R7, NR6COR7, NR6COOR7, COO-X+, COR4, OR4, SO2R7, SO2NR6R7, SO3-X+ or by SO3R7, R4 is hydrogen or has the meanings of R3, R5 is hydrogen, C1-4 alkyl, halogen, nitro, NR7R8 or OR7, R6 is hydrogen or C1-3 alkyl, R7 and R8 are each independently of the other hydrogen, C1-3 alkyl; Ph which is unsubstituted or mono- or poly-substituted by halogen, nitro, OR5, NR16R17; or benzyl which is unsubstituted or mono- or poly-substituted by halogen, nitro, OR5, NR16R17, and X+ is a cation H+, Li+, Na+, K+, Mg++1/2, Ca++1/2, Sr++1/2, Ba++1/2, Cu+, Cu++1/2, Zn++1/2, Mn++1/2, Al +++1/3 or [NR9R10R11R12]+. R9, R10, R11 and R12 are each independently of the others hydrogen; C1-6 alkyl; Ph which is unsubstituted or mono- or poly-substituted by C1-6 alkyl, halogen, nitro, OR5, NR16R17, or benzyl which is unsubstituted or mono- or poly-substituted by C1-6 alkyl, halogen, nitro, OR5, NR16R17, and R16 and R17 are each independently of the other hydrogen or C1-6 alkyl. The pigments are suitable for the coloring of high mol. wt. material and are distinguished by good fastness properties of the resulting colorations.

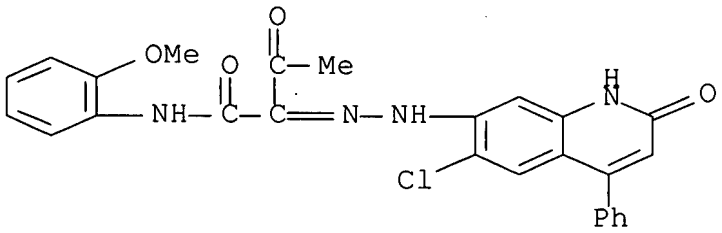
IT **769954-18-9P 769954-20-3P**
(greenish-yellow pigment; monoazoquinolone pigments, process for their prepn. and their use)

RN 769954-18-9 ZCAPLUS

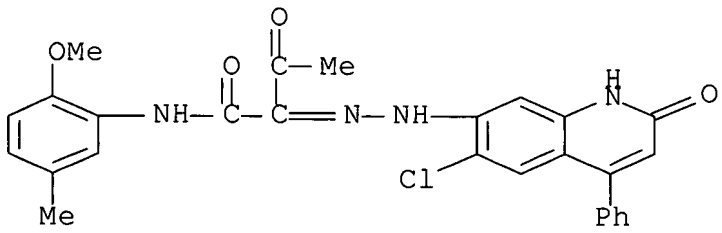
CN Butanamide, N-(6-chloro-2-benzothiazolyl)-2-[(6-chloro-1,2-dihydro-2-oxo-4-phenyl-7-quinolinyl)hydrazono]-3-oxo- (9CI) (CA INDEX NAME)



RN 769954-20-3 ZCAPLUS
CN Butanamide, 2-[(6-chloro-1,2-dihydro-2-oxo-4-phenyl-7-quinolinyl)hydrazono]-N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



IT **769954-21-4P**
(yellow pigment; monoazoquinolone pigments, process for their prepn. and their use)
RN 769954-21-4 ZCAPLUS
CN Butanamide, 2-[(6-chloro-1,2-dihydro-2-oxo-4-phenyl-7-quinolinyl)hydrazono]-N-(2-methoxy-5-methylphenyl)-3-oxo- (9CI) (CA INDEX NAME)



IT **769954-18-9P 769954-20-3P**
(greenish-yellow pigment; monoazoquinolone pigments, process for their prepn. and their use)
IT **769954-21-4P**
(yellow pigment; monoazoquinolone pigments, process for their prepn. and their use)

L9 ANSWER 3 OF 5 ZCAPLUS COPYRIGHT 2007 ACS on STN

2000:735737 Document No. 134:29599 The synthesis of pyrido[2,3,4-kl]acridine unit of some marine alkaloids. Ozturk, Turan; McKillop, Alexander (Chemistry Department, Marmara Research Center, Gebze-Kocaeli, Turk.). Canadian Journal of Chemistry, 78(9), 1158-1164 (English) 2000. CODEN: CJCHAG. ISSN: 0008-4042. OTHER SOURCES: CASREACT 134:29599. Publisher: National Research Council of Canada.

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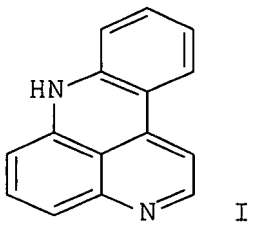


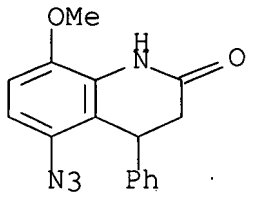
I

AB A simple and convenient synthesis of pyrido[2,3,4-kl]acridine (I), the main skeleton of some marine alkaloids, via cyclization and intramol. nitrene insertion, is described. The importance of the planarity of the mol. during the nitrene insertion is explained.

IT **312325-57-8P 312325-60-3P**
(synthesis of pyrido(2,3,4-kl)acridine unit of some marine alkaloids)

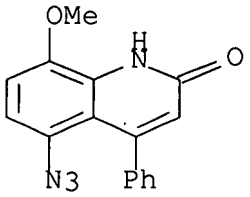
RN 312325-57-8 ZCAPLUS

CN 2(1H)-Quinolinone, 5-azido-3,4-dihydro-8-methoxy-4-phenyl- (9CI) (CA INDEX NAME)



RN 312325-60-3 ZCAPLUS

CN 2(1H)-Quinolinone, 5-azido-8-methoxy-4-phenyl- (9CI) (CA INDEX NAME)



IT **312325-57-8P 312325-60-3P**
(synthesis of pyrido(2,3,4-kl)acridine unit of some marine alkaloids)

L9 ANSWER 4 OF 5 ZCAPLUS COPYRIGHT 2007 ACS on STN
1993:102287 Document No. 118:102287 A short new route to the pyrido[2,3,4-kl]acridine subunit common to pyridoacridine alkaloids of marine origin. Ali, Naji M.; Chattopadhyay, Shital K.; McKillop, Alexander; Perret-Gentil, Roxanne M.; Ozturk, Turan; Rebelo, Ricardo A. (Sch. Chem. Sci., Univ. East Anglia, Norwich, NR4 7TJ, UK). Journal of the Chemical Society, Chemical Communications (19), 1453-4 (English) 1992. CODEN: JCCCAT. ISSN: 0022-4936. OTHER SOURCES: CASREACT 118:102287.

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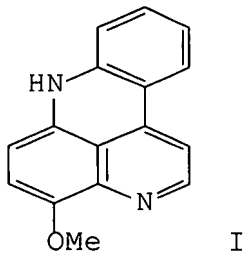

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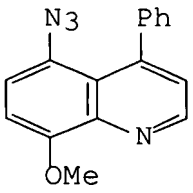
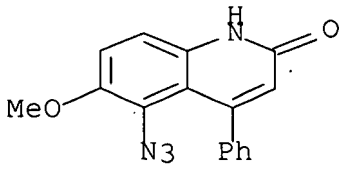


II

AB A short new route to the pyrido[2,3,4-kl]acridine, e.g. I, ring system has been developed from readily available quinoline precursors involving two key steps: (i) a palladium(0)-catalyzed Suzuki cross-coupling reaction of 4-chloroquinolines with arylboronic acids, and (ii) an intramol. nitrene insertion reaction of the nitrenes derived from 4-phenyl-5-azidoquinolines, e.g. II.

IT **145013-79-2P**
(prepn. and intramol. nitrene insertion reaction of)
RN 145013-79-2 ZCAPLUS
CN 2(1H)-Quinolinone, 5-azido-6-methoxy-4-phenyl- (9CI) (CA INDEX NAME)



IT **145013-79-2P**
(prepn. and intramol. nitrene insertion reaction of)

L9 ANSWER 5 OF 5 ZCAPLUS COPYRIGHT 2007 ACS on STN
1957:10931 Document No. 51:10931 Original Reference No. 51:2287g-i,2288a-i,2289a-b 6-Aminocarbostyrilazo dyes. Brody, Frederick; Leavitt, Julian J.; Long, Robert S. (American Cyanamid Co.). US 2754293 19560710 (Unavailable). APPLICATION: US .
GI For diagram(s), see printed CA Issue.
AB A new series of azo dyes of the general formula I are described, where A represents the radical of a coupling component and in which rings B and C may be further substituted. 2,5-(EtO)2C6H3NH2 (II) 12 parts in AcCH2CO2Et refluxed, cooled, and dild. with petr. ether yielded 2,5-(EtO)2C6H3NHCOCH2Ac (III). III 66.4 added at 85° to concd. H2SO4 184 parts, the dark-brown soln. kept at 85-90° until the cyclization is complete, cooled, poured into H2O and ice, made alk. and filtered, and the residue recrystd. from aq. EtOH gave pure 5,8-diethoxy-4-methylcarbostyril (IV). IV 5.7 in AcOH 31.5 treated in the cold dropwise with concd. HNO3 2.5 parts, and the resulting slurry poured into cold H2O and filtered gave the 6-NO2 deriv. (V) of IV, bright greenish yellow solid. V 6.2 in EtOH 197 hydrogenated over Pd-C 0.5 parts, filtered, and evapd., and the residue dissolved in dil. HCl, clarified with C, and repptd. with NH4OH gave the 6-NH2 analog (VI) of V. 5,8-di-MeO analog 4.96 of IV in AcOH 21 treated with concd. HNO3 2.1 parts gave similarly the 5,8-di-MeO analog (VII) of V. VII 7.9 in EtOH 119 parts hydrogenated over Pd-C, filtered, and evapd., the residue dissolved in CHCl3, and the soln. treated with dry HCl pptd. the 6-NH2 analog (VIII) HCl salt of VII. 4,5-Dimethyl-8-methoxycarbostyril 50 in AcOH 525 treated with stirring with 96% HNO3 30 parts, the mixt. heated on the steam bath, and poured into H2O and ice, and the ppt. recrystd. from EtOH gave the 6-

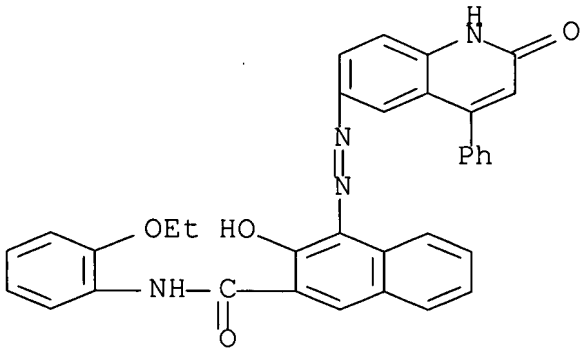
NO2 deriv., (IX), yellow solid. IX 3.44 in EtOH 120 parts hydrogenated with gentle warming over Pd-C, the resulting greenish slurry filtered, the product dissolved in dil. HCl, and the soln. clarified and treated with NH4OH gave the 6-NH2 analog (X) of IX, greenish yellow needles. 8-Chloro-4-methylcarbostyril 11.95 in AcOH 52.5 refluxed with 96% HNO3 6.0 parts gave a pale-yellow product which recrystd. from AcOH yielded the 6-NO2 deriv. (XI), white needles. XI 7.38 in H2O 120 parts hydrogenated at room temp. over Pd-C gave the 6-NH2 analog (XII) of XI, recrystd. from C6H4Cl2. 5-Chloro-8-methoxy-4- methylcarbostyril (XIII) 26.8 in AcOH 157.5 heated with stirring on the steam bath with 95% HNO3 11.25 parts, cooled, and filtered gave the 6-NO2 deriv. (XIV) of XIII, bright-yellow solid, recrystd. from AcOH. XIV 8.06 in AcOH 52.5 treated with SnCl2.2H2O 27 in concd. HCl 41, the mixt., which heats spontaneously to the b.p., cooled, poured into 50% aq. NaOH 145 and ice 200 parts, and filtered, and the residue washed with H2O, dried, and recrystd. from EtOH gave 6-amino-8-methoxy-4-methylcarbostyril (XV), greenish yellow solid. 4-Phenylcarbostyril (XVI) 8.0 in AcOH 157.5 refluxed with stirring with 96% HNO3 12.0 parts and cooled gave the 6-NO2 deriv. (XVII) of XVI, pale-yellow solid. XVII 3.7 in EtOH 200 hydrogenated at about 60° over Pd-C 0.5 parts, filtered, and evapd. to dryness in vacuo, the bright yellow residue dissolved in dil. HCl, and the soln. clarified with diatomaceous earth and made alk. with dil. NH4OH yielded the 6-NH2 analog (XVIII) of XVII which was recrystd. from PhCl. o-PhC6H4NHCOCH2Ac 20 in concd. H2SO4 110 kept at room temp. until the cyclization is completed, the mixt. poured into H2O 1000, made alk. with 50% aq. NaOH 150, and filtered, the filter cake washed, slurried in H2O 300 and 20% aq. NaOH 30 parts, and stirred overnight, and the product filtered and dried at room temp. in vacuo gave a clear, sticky, pale-amber glass which slowly turned to a hard white cryst. solid of 4-methyl-8-phenylcarbostyril (XIX), recrystd. from aq. EtOH. XIX 20.0 in concd. H2SO4 184 treated at 0-5° with 96% HNO3 7.5 in concd. H2SO4 37 parts, and the mixt. stirred at room temp. and drowned in H2O gave the 6-NO2 deriv. (XX) of XIX mixed with a di-NO2 deriv.; the yellow solid mixt. was sepd. by fractional crystn. from AcOH. XX 8.3 in EtOH 80 hydrogenated at 40-50° over Pd-C 0.5 parts and the product recrystd. from PhCl yielded the 6-NH2 analog (XXI) of XX, greenish yellow solid. II 8.1, BzCH2CO2Et 12.9, PhCl 83, and (HOCH2CH2)2NH 1.5 parts refluxed and dild. with petr. ether, and the ppt. recrystd. from EtOH gave 2,5-(EtO)2C6H3NHCOCH2Bz (XXII), white needles. XXII 1.0, p-MeC6H4SO3H.H2O 1.0, and C6H6 26.5 parts refluxed, the mixt. steam distd. to remove the C6H6, and the residual slurry filtered and crystd. from BuOH gave 5,8-diethoxy-4-phenylcarbostyril (XXIII). XXIII 8.1 in AcOH 26.3 treated with cooling and stirring with concd. HNO3 3 parts and the product recrystd. from dioxane gave the 6-NO2 deriv. (XXIV), yellow solid. XXIV 1.77 in EtOH 160 hydrogenated over

Pd-C 0.5 parts and the product recrystd. from BuOH gave the 6-NH2 deriv. (XXV) of XXIV, bright-yellow needles. 7,8-Benzo-4-methylcarbostyril 10.0 in AcOH 262.5 refluxed with 96% HNO3 4.5 parts until no more product pptd. and filtered, and the filter residue recrystd. from AcOH gave the 6-NO2 deriv. (XXVI), bright-yellow solid. XXVI 10.2 in EtOH 120 parts hydrogenated over Pd-C, the crude slurry filtered and leached with dil. HCl, and the soln. filtered and made alk. with NH4OH gave the 6-NH2 analog (XXVII) of XXVI, olive-yellow crystals from o-C6H4Cl2. VI 1.20 in hot H2O 2.5 treated with concd. HCl 2.4, cooled, treated with ice and H2O 10 and then with NaNO2 0.35 in H2O 0.35 parts, the resulting clear orange-yellow soln. filtered through Filter-Cel, dild. with H2O, and neutralized with aq. NaOAc to Congo red, and the resulting bath used to dye cotton previously padded with 2% by wt. of 3,2-PhNHOCC10H6OH (XXVIII) gave a strong blue shade of good fastness properties. X 20.0, H2O 150, and concd. HCl 42 cooled to 20°, dild. with H2O 150, diazotized at 19-20° with N aq. NaNO2 90, clarified, and added to an aq. soln. of MeNHCH2CO2Na 9.55 and Na2CO3 59.4 at 10-15°, the soln. clarified with Cl and diatomaceous earth 5, salted with NaCl to 10% concn., chilled, and filtered, the residual compound dried in vacuo at 50°, a portion 4.33 mixed with XXVIII 3.16 and dextrin 2.51, a portion 3 of the resulting blend dissolved in EtO(CH2)2OH 3, aq. NaOH (30° B.acte.e.) 1.25, and H2O 22.75, the soln. stirred into 5% medium viscosity carboxymethylcellulose 70 parts, the resulting paste printed on cotton, and the cloth dried, steamed at 100° in an atm. contg. AcOH, soaped, and dried gave prints of deep-violet shade of excellent fastness properties.

IT **122337-21-7P**, 2-Naphtho-o-phenetidide, 4-(1,2-dihydro-2-oxo-4-phenyl-6-quinolylazo)-3-hydroxy-
(prepn. of)

RN 122337-21-7 ZCAPLUS

CN 2-Naphtho-o-phenetidide, 4-(1,2-dihydro-2-oxo-4-phenyl-6-quinolylazo)-3-hydroxy- (6CI) (CA INDEX NAME)



IT **122337-21-7P**, 2-Naphtho-o-phenetidide, 4-(1,2-dihydro-2-oxo-4-phenyl-6-quinolylazo)-3-hydroxy-
(prepn. of)

=> FILE BEILSTEIN
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FILE LAST UPDATED ON JUNE 16, 2006

FILE COVERS 1771 TO 2006.
*** FILE CONTAINS 9,606,495 SUBSTANCES ***

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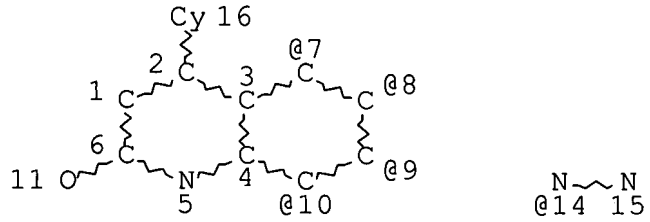

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GGCAT IS UNS AT 16
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
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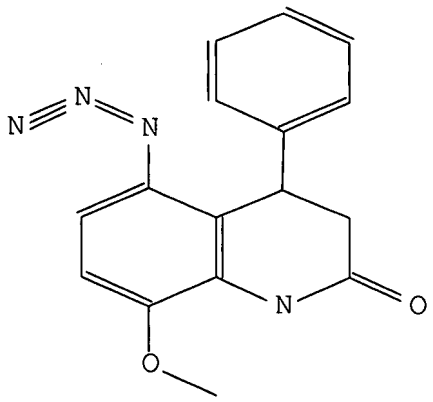
100.0% PROCESSED 11549 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.08

=> D L11 1-3 ALL

L11 ANSWER 1 OF 3 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

Beilstein Records (BRN):	8849874
Chemical Name (CN):	5-azido-3,4-dihydro-8-methoxy-4-phenylquinolin-2(1H)-one
Autonom Name (AUN):	5-azido-8-methoxy-4-phenyl-3,4-dihydro-1H-quinolin-2-one
Molec. Formula (MF):	C16 H14 N4 O2
Molecular Weight (MW):	294.31
Lawson Number (LN):	26074, 289
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	7488307
Tautomer ID (TAUTID):	8343303
Entry Date (DED):	2001/10/25
Update Date (DUPD):	2001/10/25



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BRN	Beilstein Records	1

CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	2
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
DED	Entry Date	1
DUPD	Update Date	1
IR	Infrared Spectrum	1
MP	Melting Point	1
NMR	Nuclear Magnetic Resonance	3

This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	1
RXPRO	Substance is Reaction Product	1

Melting Point:

Value (MP) (Cel)	Ref.
134 - 137	1

Reference(s):

1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

Nuclear Magnetic Resonance:

NMR

Coupling Nuclei (.NUI)	1H-1H
Solvents (.SOL):	dimethylsulfoxide-d6
Reference(s):	

1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

NMR

Description (.KW):	Chemical shifts
Nucleus (.NUC):	1H
Solvents (.SOL):	dimethylsulfoxide-d6
Reference(s):	

1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

NMR

Description (.KW):	Chemical shifts
Nucleus (.NUC):	13C
Solvents (.SOL):	dimethylsulfoxide-d6
Frequency (.F):	24 MHz

Reference(s):

1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

Infrared Spectrum:

Description (.KW)	Solvent (.SOL)	Ref.
Bands	nujol	1

Reference(s):

1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

Reaction:

RX

Reaction ID (.ID):	8844724
Reactant BRN (.RBRN):	8849317
Reactant (.RCT):	5-amino-8-methoxy-4-phenyl-3,4-dihydro-1H-quinolin-2-one
Product BRN (.PBRN):	8849874
Product (.PRO):	5-azido-8-methoxy-4-phenyl-3,4-dihydro-1H-quinolin-2-one
No. of React. Details (.NVAR):	1

Reaction Details:

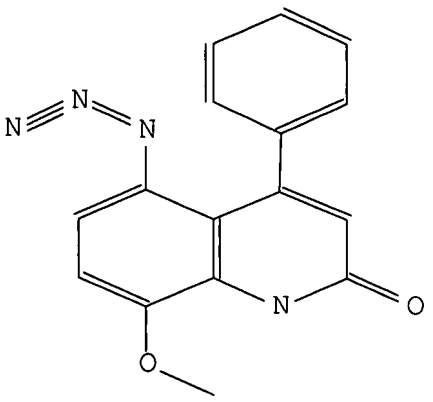
RX

Reaction RID (.RID):	8844724.1
Reaction Classification (.CL):	Multistage
Yield (.YDT):	86 percent (BRN=8849874)
Nr. of Stages (.SNR):	2
Stage 1	
Reagent (.RGT):	aq. H2SO4, aq. NaNO2
Time (.TIM):	45 min
Temperature (.T):	0 - 5 Cel
Stage 2	

Reagent (.RGT): aq. NaN3
Time (.TIM): 40 min
Temperature (.T): 0 - 5 Cel
Reference(s):
1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

L11 ANSWER 2 OF 3 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

Beilstein Records (BRN): 8849873
Chemical Name (CN): 5-azido-8-methoxy-4-phenylquinolin-2(1H)-one
Autonom Name (AUN): 5-azido-8-methoxy-4-phenyl-1H-quinolin-2-one
Molec. Formula (MF): C16 H12 N4 O2
Molecular Weight (MW): 292.30
Lawson Number (LN): 26074, 289
Compound Type (CTYPE): heterocyclic
Constitution ID (CONSID): 7488306
Tautomer ID (TAUTID): 8343302
Entry Date (DED): 2001/10/25
Update Date (DUPD): 2001/10/25



Field Availability:

Code	Name	Occurrence
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CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	2
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
DED	Entry Date	1
DUPD	Update Date	1
CPD	Crystal Property Description	1
IR	Infrared Spectrum	1
NMR	Nuclear Magnetic Resonance	1

This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	2
RXREA	Substance is Reaction Reactant	1
RXPRO	Substance is Reaction Product	1

Crystal Property Description:
CPD

(CPD): yellow

Reference(s):

1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

Nuclear Magnetic Resonance:
NMR

Description (.KW): Chemical shifts
Nucleus (.NUC): 1H
Solvents (.SOL): CDCl3

Reference(s):

1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

Infrared Spectrum:

Description	Solvent	Ref.

(.KW)	(.SOL)	
Bands	nujol	1

Reference(s):
1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

Reaction:
RX

Reaction ID (.ID):	8844725
Reactant BRN (.RBRN):	8849318
Reactant (.RCT):	5-amino-8-methoxy-4-phenyl-1H-quinolin-2-one
Product BRN (.PBRN):	8849873
Product (.PRO):	5-azido-8-methoxy-4-phenyl-1H-quinolin-2-one
No. of React. Details (.NVAR):	1

Reaction Details:
RX

Reaction RID (.RID):	8844725.1
Reaction Classification (.CL):	Multistage
Yield (.YDT):	93 percent (BRN=8849873)
Nr. of Stages (.SNR):	2
Stage 1	
Reagent (.RGT):	aq. H2SO4, aq. NaNO2
Time (.TIM):	45 min
Temperature (.T):	0 - 5 Cel
Stage 2	
Reagent (.RGT):	aq. NaN3
Time (.TIM):	40 min
Temperature (.T):	0 - 5 Cel

Reference(s):
1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

Reaction:
RX

Reaction ID (.ID):	8844883
Reactant BRN (.RBRN):	8849873
Reactant (.RCT):	5-azido-8-methoxy-4-phenyl-1H-quinolin-2-one
Product BRN (.PBRN):	8851224
Product (.PRO):	4-methoxy-3H,7H-pyrido<2,3,4-kl>acridin-2-one

No. of React. Details (.NVAR): 1

Reaction Details:
RX

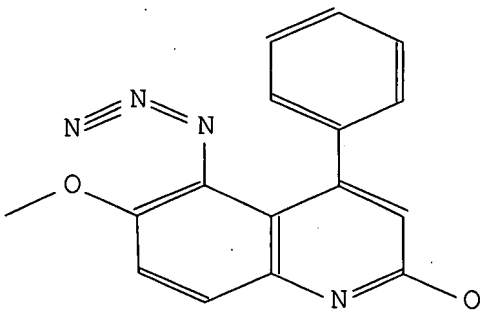
Reaction RID (.RID):	8844883.1
Reaction Classification (.CL):	Preparation
Yield (.YDT):	78 percent (BRN=8851224)
Solvent (.SOL):	xylene
Time (.TIM):	1.5 hour(s)
Other Conditions (.COND):	Heating

Reference(s):

1. Ozturk, Turan; McKillop, Alexander, Can.J.Chem., CODEN: CJCHAG, 78(9), <2000>, 1158 - 1164; BABS-6294570

L11 ANSWER 3 OF 3 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

Beilstein Records (BRN):	5824269
Chemical Name (CN):	5-azido-6-methoxy-4-phenyl-quinolin-2-ol
Autonom Name (AUN):	5-azido-6-methoxy-4-phenyl-quinolin-2-ol
Molec. Formula (MF):	C16 H12 N4 O2
Molecular Weight (MW):	292.30
Lawson Number (LN):	25154, 289
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	5106945
Tautomer ID (TAUTID):	5584952
Beilstein Citation (BSO):	6-21
Entry Date (DED):	1993/05/04
Update Date (DUPD):	1994/02/03



Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	2
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
DED	Entry Date	1
DUPD	Update Date	1

This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	2
RXREA	Substance is Reaction Reactant	1
RXPRO	Substance is Reaction Product	1

Reaction:
RX

Reaction ID (.ID):	3215850
Reactant BRN (.RBRN):	5819397
Reactant (.RCT):	5-amino-6-methoxy-4-phenyl-quinolin-2-ol
Product BRN (.PBRN):	5824269
Product (.PRO):	5-azido-6-methoxy-4-phenyl-quinolin-

2-ol
No. of React. Details (.NVAR): 1

Reaction Details:
RX
Reaction RID (.RID): 3215850.1
Reaction Classification (.CL): Preparation
Reagent (.RGT): 1.) NaNO2, H2SO4, 2.) NaN3
Other Conditions (.COND): 1.) from 0 to 5 deg C, 1 h, 2.) from 0 deg C to RT, 1.5 h
Note(s) (.COM): Multistep reaction
Reference(s):
1. Ali, Naji M.; Chattopadhyay, Shital K.; McKillop, Alexander; Perret-Gentil, Roxanne M.; Ozturk, Turan; Rebelo, Ricardo A., J.Chem.Soc.Chem.Commun., CODEN: JCCCAT(19), <1992>, 1453-1454; BABS-5705480

Reaction:
RX
Reaction ID (.ID): 3217455
Reactant BRN (.RBRN): 5824269
Reactant (.RCT): 5-azido-6-methoxy-4-phenyl-quinolin-2-ol
Product BRN (.PBRN): 5820771
Product (.PRO): 6-methoxy-7H-pyrido<2,3,4-kl>acridin-2-ol
No. of React. Details (.NVAR): 1

Reaction Details:
RX
Reaction RID (.RID): 3217455.1
Reaction Classification (.CL): Preparation
Solvent (.SOL): xylene
Time (.TIM): 2 hour(s)
Other Conditions (.COND): Heating
Reference(s):
1. Ali, Naji M.; Chattopadhyay, Shital K.; McKillop, Alexander; Perret-Gentil, Roxanne M.; Ozturk, Turan; Rebelo, Ricardo A., J.Chem.Soc.Chem.Commun., CODEN: JCCCAT(19), <1992>, 1453-1454; BABS-5705480

=> FILE MARPAT
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE CONTENT: 1961-PRESENT VOL 146 ISS 1 (20061229/ED)

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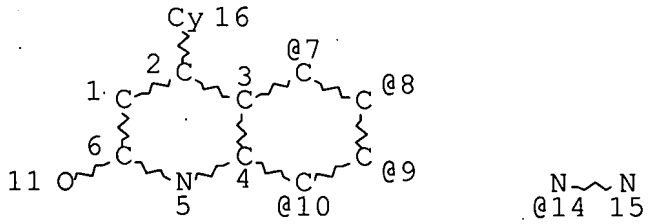

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GGCAT IS UNS AT 16
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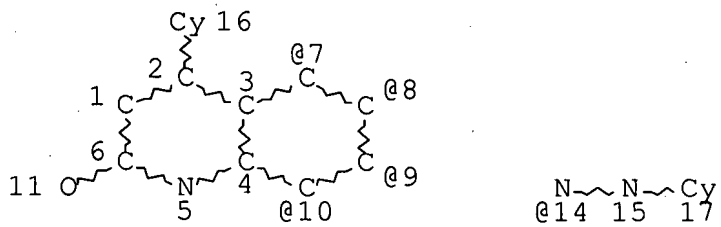

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GGCAT IS UNS AT 17
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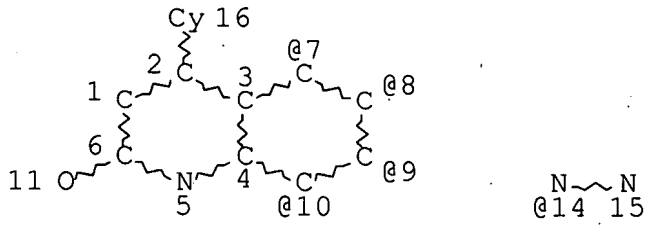

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GGCAT IS UNS AT 16
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
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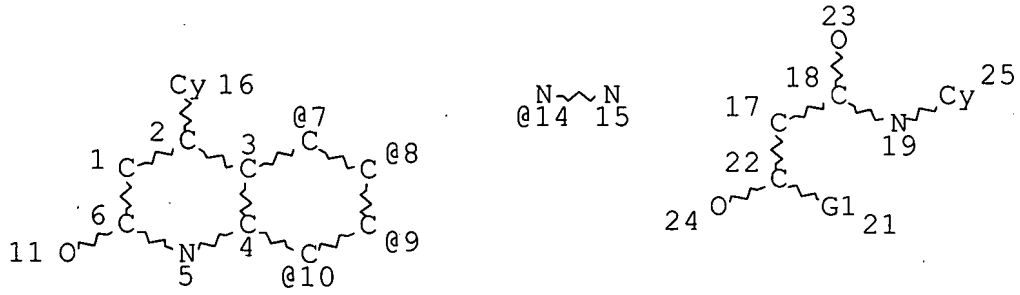

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GGCAT IS UNS AT 16
GGCAT IS UNS AT 25
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE
L21 4 SEA FILE=MARPAT SUB=L13 SSS FUL L19

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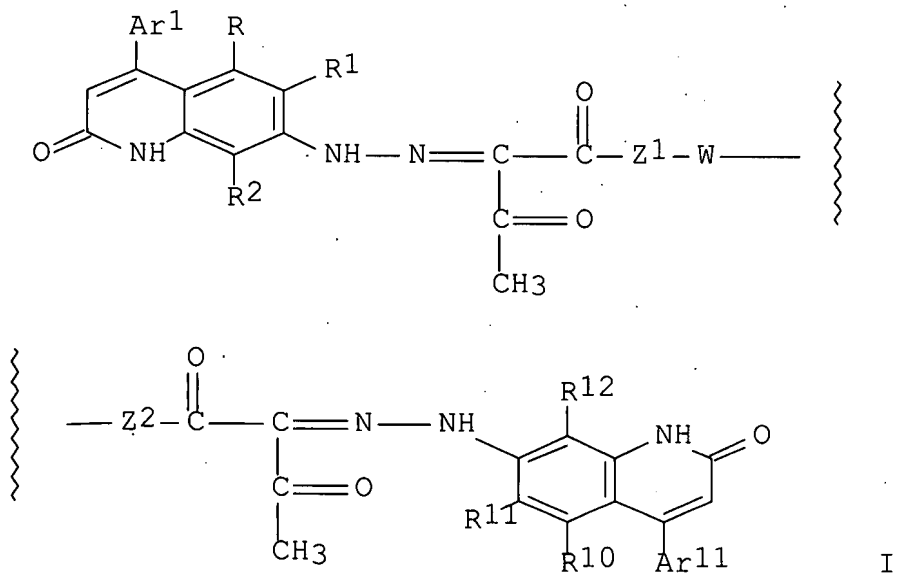
SEARCH TIME: 00.00.24

=> D L24 1-5 CBIB ABS QHIT

L24 ANSWER 1 OF 5 MARPAT COPYRIGHT 2007 ACS on STN
142:58222 Bisazoquinolone pigments with good fastness properties, processes for their preparation and their use. Benkhoff, Johannes; Huegin, Max; Eichenberger, Thomas (Ciba Specialty Chemicals Holding Inc., Switz.). PCT Int. Appl. WO 2004111134 A1 20041223, 25 pp.
DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW;

RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR.
(English). CODEN: PIXXD2. APPLICATION: WO 2004-EP51023 20040604.
PRIORITY: CH 2003-1036 20030613.

GI

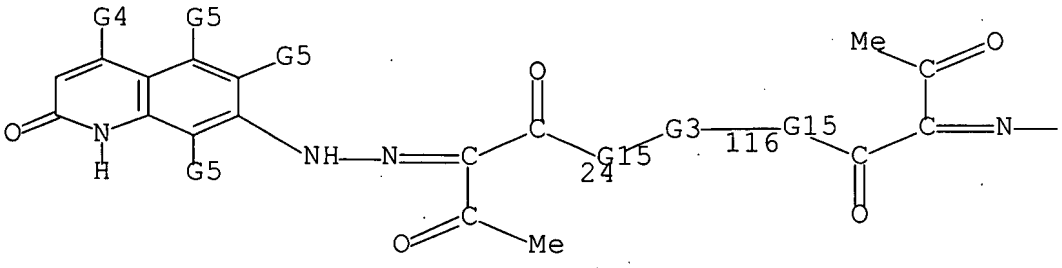


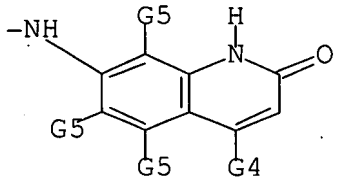
I

AB The invention relates to bisazoquinolone pigments which, in one of the tautomeric forms thereof, correspond to formula (I). The W is the radical of an unsubstituted or substituted C6-C24 aryl or the radical of an unsubstituted or substituted heteroaryl. The Ar1 is unsubstituted or substituted C6-C24 aryl or unsubstituted or substituted heteroaryl. The Ar11 is unsubstituted or substituted C6-C24 aryl or unsubstituted or substituted heteroaryl. The R, R1, R2, R11, R12 are each independently of the others hydrogen, C1-C6 alkyl, halogen, cyano, CF3, nitro, NR3R4, COOR4, NR4COR3, COOX+, COR4, OR4, SR3, S02R3, S02NR3R4 S03-X+, or C6-C24 aryl unsubstituted or mono- or poly-substituted by R5. The R3 is C1-C6 alkyl, or C6-C12 aryl unsubstituted or mono- or polysubstituted by halogen, hydroxy, OR7, cyano, nitro, SR7, NR6R7, COOR7, CONR6R7, NR6COR7, NR6COOR7, COO-X+, COR4, OR4, S02R7, S02NR6, S03-X+ or by S03R7. The R4 is hydrogen or has the same meanings as R3; R5 is hydrogen, C1-C4 alkyl, halogen, nitro, NR7R8 or OR7; and R6 is hydrogen or C1-C3 alkyl. The R7 and R8 are each independently of the other hydrogen, C1-C3 alkyl, Ph

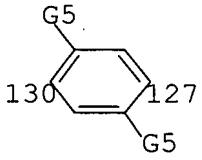
unsubstituted or mono- or poly-substituted by halogen, nitro, OR5 or by NR16R17, or benzyl unsubstituted or mono- or poly-substituted by halogen, nitro, OR5 or by NR16R17, and X+ is a cation H+, Li+, Na+, K+, Mg++1/2, Ca++1/2, Sr++1/2, Ba++1/2, Cu+, Cu++1/2, Zn++1/2, Mn++1/2, Al+++1/3 or [NR19R20R21R22]+ wherein R19, R20, R21 and R22 are each independently of the others hydrogen, C1-C6 alkyl, Ph unsubstituted or mono- or polysubstituted by C1-C6 alkyl, halogen, nitro, OR5 or by NR16R17, or benzyl unsubstituted or mono- or poly-substituted by C1-C6 alkyl, halogen, nitro, OR5 or by NR16R17, R16 and R17 are each independently of the other hydrogen or C1-C6 alkyl. The Z1 is -NH- or -0-, and Z2 is -NH or -0-, are suitable for coloring high mol. wt. material and are distinguished by the resulting colorations having good fastness properties.

MSTR 1





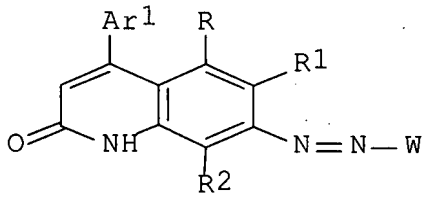
G3 = 130-24 127-116



G4 = Ph (opt. substd.)
G15 = NH
Patent location: claim 1
Note: or tautomeric forms

L24 ANSWER 2 OF 5 MARPAT COPYRIGHT 2007 ACS on STN
141:333640 Monoazoquinolone pigments, process for their preparation and their use. Benkhoff, Johannes; Wallquist, Olof (Ciba Specialty Chemicals Holding Inc., Switz.). PCT Int. Appl. WO 2004085540 A1 20041007, 46 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2004-EP50308 20040315. PRIORITY: CH 2003-515 20030325.

GI

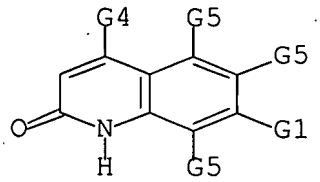


I

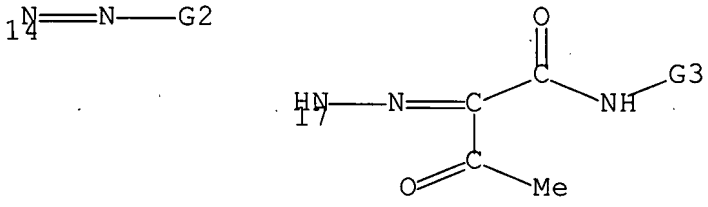
AB Monoazoquinolone pigments, in one of their tautomeric forms, correspond to I. In I, W is (substituted) C6-24 aryl or (substituted) heteroaryl or is a radical of formula (1a), wherein Ar1 is (substituted) C6-24 aryl or (substituted) heteroaryl, R, R1 and R2 are each independently hydrogen, C1-6 alkyl, halogen, cyano, CF3, nitro, NR3R4, COOR4, NR4COR3, COO-X+, COR4, OR4, SR3, SO2R3, SO2NR3R4, SO3-X+, or C6-24 aryl which is unsubstituted or mono- or polysubstituted by R5. R3 is C1-6 alkyl, or C6-12 aryl which is unsubstituted or mono- or poly-substituted by halogen, hydroxy, OR7, cyano, nitro, SR7, NR6R7, COOR7, CONR6R7, NR6COR7, NR6COOR7, COO-X+,

COR4, OR4, SO2R7, SO2NR6R7, SO3-X+ or by SO3R7, R4 is hydrogen or has the meanings of R3, R5 is hydrogen, C1-4 alkyl, halogen, nitro, NR7R8 or OR7, R6 is hydrogen or C1-3 alkyl, R7 and R8 are each independently of the other hydrogen, C1-3 alkyl; Ph which is unsubstituted or mono- or poly-substituted by halogen, nitro, OR5, NR16R17; or benzyl which is unsubstituted or mono- or poly-substituted by halogen, nitro, OR5, NR16R17, and X+ is a cation H+, Li+, Na+, K+, Mg++1/2, Ca++1/2, Sr++1/2, Ba++1/2, Cu+, Cu++1/2, Zn++1/2, Mn++1/2, Al +++1/3 or [NR9R10R11R12]+. R9, R10, R11 and R12 are each independently of the others hydrogen; C1-6 alkyl; Ph which is unsubstituted or mono- or poly-substituted by C1-6 alkyl, halogen, nitro, OR5, NR16R17, or benzyl which is unsubstituted or mono- or poly-substituted by C1-6 alkyl, halogen, nitro, OR5, NR16R17, and R16 and R17 are each independently of the other hydrogen or C1-6 alkyl. The pigments are suitable for the coloring of high mol. wt. material and are distinguished by good fastness properties of the resulting colorations.

MSTR 1



G1 = 14 / 17

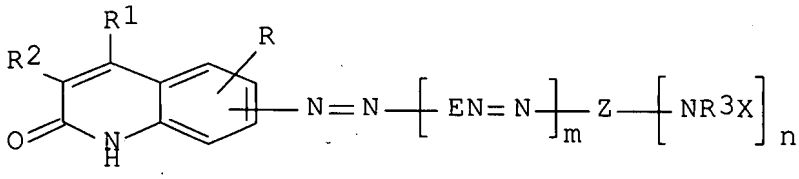


G2 = Ph (opt. substd.)
G3 = Ph (opt. substd.)
G4 = Ph (opt. substd.)
Patent location: claim 1
Note: or tautomeric forms

Note: also incorporates claim 8, structure 50

L24 ANSWER 3 OF 5 MARPAT COPYRIGHT 2007 ACS on STN
128:218371 Water-soluble quinolinone reactive azo dyes, their preparation and their use. Schumacher, Christian (DyStar Textilfarben G.m.b.H. und Co. Deutschland K.-G., Germany). Ger. Offen. DE 19636483 A1 19980312, 30 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1996-19636483 19960909.

GI



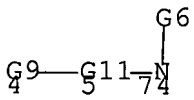
I

AB The dyes (I; E = phenylene or naphthylene deriv.; R = H, C1-4-alkyl or -alkoxy, halogen, sulfo; R1 = H, C1-4-alkyl, halogen, sulfo, carboxy, aminocarbonyl, C2-5-alkoxycarbonyl, Ph; R2 = H, C1-4-alkyl, halogen; R3 = H, optionally substituted C1-4-alkyl, optionally substituted naphthyl or Ph; X = fiber-reactive group; Z = phenylene or naphthylene deriv., divalent heterocyclic group; m = 0-2; n = 1-2) contg. ≥1 sulfo group are obtained from a quinolinone diazo component and are suitable for dyeing and printing of fabrics. I show good application and fastness properties on cellulosics. Thus, cyanuric chloride was condensed with aniline-2,5-disulfonic acid and then with 3-amino-8-hydroxy-6-sulfonaphthalene to provide a monochloro coupling component which was then treated with diazotized 6-amino-4-methyl-2-quinolinol to give a fast red dye (λmax 507 nm) for cotton.

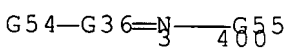
MSTR 1

G1——G15

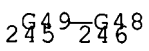
G1 = 74



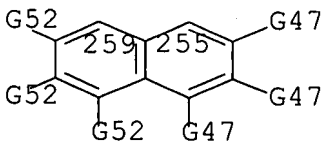
G2 = Ph
G9 = 400



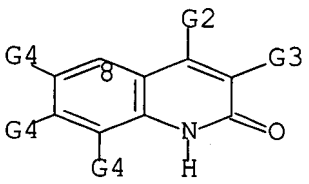
G11 = 245-4 246-74



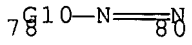
G36 = N
G48 = bond
G49 = 259-4 255-246



G54 = 8



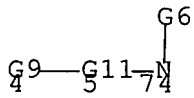
G55 = (0-2) 78-3 80-5



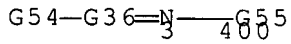
Patent location: claim 1
Note: substitution is restricted

MSTR 1

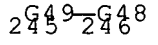
G1 = 74



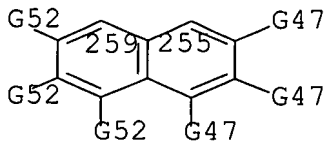
G2 = Ph
G9 = 400



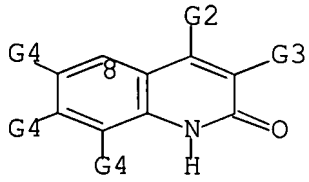
G11 = 245-4 246-74



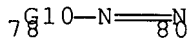
G36 = N
G48 = bond
G49 = 259-4 255-246



G54 = 8



G55 = (0-2) 78-3 80-5

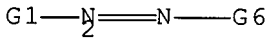


Patent location: claim 1
Note: substitution is restricted

L24 ANSWER 4 OF 5 MARPAT COPYRIGHT 2007 ACS on STN
119:98167 Ethylene oxide sterilization indicator ink compositions.
Fujisawa, Toshiki (Sakura Color Products Corp., Japan). Jpn. Kokai Tokkyo Koho JP 05001252 A2 19930108 Heisei, 10 pp. (Japanese).
CODEN: JKXXAF. APPLICATION: JP 1991-151914 19910624.

AB The title compns. with good printability and sharp color development contain (A) ≥1 disperse dyes AN:NB (A = alkyl group-free N-heterocyclic azo component residue; B = coupler residue), (B) poly[(meth)acrylic acid] and/or acrylic acid-methacrylic acid copolymer, (C) superfine filler(s) chosen from silica, alumina, and titania, and (D) polar solvent(s). A typical ink comprised C.I. Disperse Red 58 0.8, poly(acrylic acid) 6.0, Aerosil 200 1.5, and iso-PrOH 91.7%.

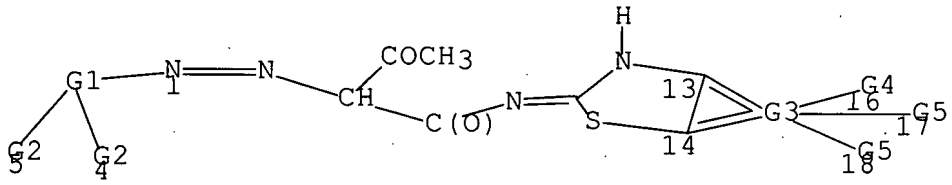
MSTR 1



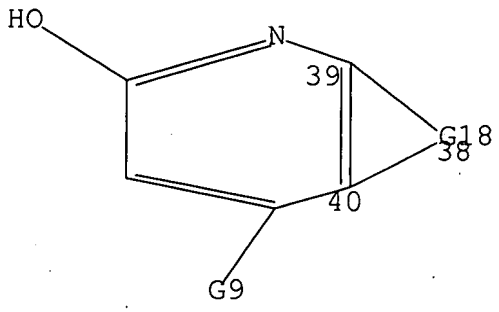
G1 = quinolinyl (substd. by (2) G2)
G2 = OEt / Ph
G6 = Ph (substd. by 1 or more G7)
Patent location: claim 1

L24 ANSWER 5 OF 5 MARPAT COPYRIGHT 2007 ACS on STN
97:93949 Heterocyclic monoazo pigments. Hari, Stefan; Wick, Arnold (Ciba-Geigy A.-G., Switz.). Eur. Pat. Appl. EP 51560 A1 19820512, 18 pp. DESIGNATED STATES: R: CH, DE, FR, GB, IT. (German). CODEN: EPXXDW. APPLICATION: EP 1981-810394 19810928. PRIORITY: CH 1980-7401 19801003.
GI For diagram(s), see printed CA Issue.
AB Azo pigments (I; R = H, Me, Cl, MeO, EtO, PhO, C2-5 alkoxycarbonyl; R1 = Me, Cl, F, Br, C1-4 alkoxy, PhO, MeO2C, EtO2C, H2NCO, NO2, NHCOR2; R2 = C1-3 alkyl; X = atoms to complete a 5- or 6-membered heterocyclic ring, CONHCO, CONHCONH, CONHCR3:N, NHCONR4, NHCOCONH, NR4CO2, NR4COS, N:CR5O, N:CR5S, N:CR5NH, NHCOCH:CR4, NHCOCH2O; R3 = H, substituted phenyl; R4 = H, C1-4 alkyl, optionally substituted phenyl; R5 = Me, Ph; n = 1-2; m = 1-3) were prepd. and were used to color plastics and coatings fast yellow to red shades. Thus, 5-amino-6-methylbenzimidazolone [67014-36-2] was diazotized and coupled with 2-acetoacetamido-6-ethoxybenzothiazole [4273-88-5] to give I(R = 5-Me, R1 = 6-Me, azo bond in 6-position; X = NHCONH) [82789-86-4], orange in PVC [9002-86-2].

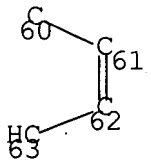
MSTR 1



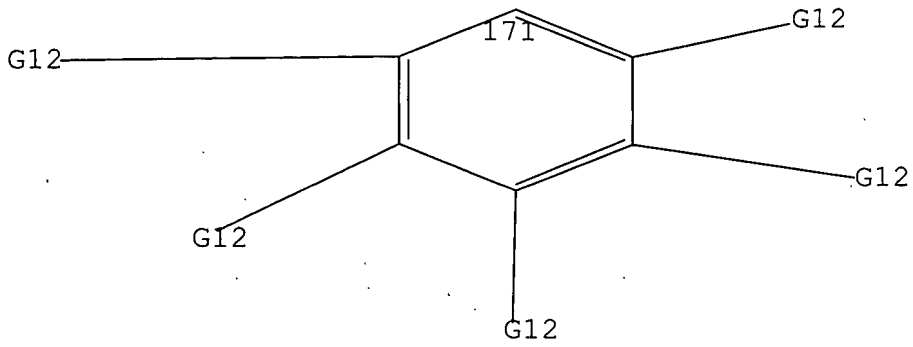
G1 = 38



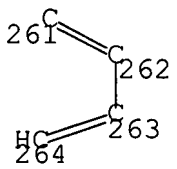
G3 = 60-13 61-17 60-16 62-18 63-14



G9 = 171



G18 = 261-1 262-4 261-39 263-5 264-40



Patent location: claims
Note: record may include structures from disclosure